FIVE I.T. TRENDS - Fall 2022

NATIONAL CONVERGENCE TECHNOLOGY CENTER

The list below summarizes IT trends discussed by the National CTC's BILT (Business and Industry Leadership Team) at the May 2022 and August 2022 meetings. The purpose of these "trend talks" is to keep faculty – and their students – informed on the ever-evolving IT landscape.

1 **Technicians who don't know Lean and Agile will be "lost."** Companies that embrace Lean or Agile principles are often further ahead than those that do not. Cutting waste and inefficiencies are important concepts for students. One IT executive at a leading DoD contractor noted that every program he does and has done uses Agile. All of his new hires have to work in this mode.
Learn more: https://www.netsolutions.com/insights/lean-vs-agile/

2 **Students need to know the value of identifying organizational goals and understanding how those goals align with the network architecture.** Managers may not always provide that information, so students need to learn to ask it themselves: "How does what I'm doing relate to the organization's success?" One CEO noted that millennial workers, in particular, seem to want to understand how they're making a difference. If they don't feel valued and don't see their contribution, they'll leave. Employers need to embrace this mindset and that need to feel ownership.
Learn more: https://www.forbes.com/sites/forbestechcouncil/2022/02/09/16-ways-to-align-your-tech-teams-work-with-overall-business-goals/?sh=544443737fba

3 **Small businesses face challenges getting cybersecurity insurance policies.** Years ago, business owners only had to answer three questions but the policies are becoming more complicated. Now it's pages and pages of questions that must be addressed, much of it is built around multi-factor authentication and password management. In addition, it's not enough to just answer the questions – more and more, businesses have to provide proof that they're following the practices they say they're following. The challenge is that so many small business owners don't have the necessary expertise in technology.
Learn more: https://www.northbaybusinessjournal.com/article/specialsections/why-small-businesses-need-to-take-cybersecurity-seriously/

4 **Students should get one of the big three certifications for cloud** – AWS, Azure, or Google. One BILT member stated his belief that it will be hard to get an interview without one of those industry certifications. While there is a clear AWS bias across all industries, each platform offers unique specialties – if you're going to build a big analytics system, you need Google; if you're going to build an open-source solution, you need AWS; if you're building in Microsoft Windows, you need to be in Azure.
Learn more: https://www.businessnewsdaily.com/10748-top-5-cloud-certifications.html

5 **But on-prem data centers aren't going away.** The BILT agreed most companies will never go all the way into the cloud, whether for compliance purposes, customer preference, or simply as a failsafe to pivot out of the cloud in the event of a technical problem. Further, students need to understand the pros and cons of implementing cloud versus on-prem, whether it's cost or scalability or some other factor. One BILT member noted that hybrid cloud systems will probably be the answer for "a very long time."
Learn more: https://www.protocol.com/manuals/new-enterprise/data-centers-hybrid-cloud